

**REMARKS**

Prior to entry of this amendment, claims 10-15 are pending, claims 16 and 17 having been withdrawn in response to the Restriction Requirement mailed on April 15, 2004. By this amendment, claims 14, 16 and 17 are canceled, claims 10-13 and 15 are amended, and new claims 18 and 19 are added. The subject matter of the amendments to claims 10-13 and 15 and new claims 18 and 19 is fully supported in the specification as filed, and thus, no new matter is added.

Favorable reconsideration of this application is respectfully requested in view of the foregoing amendments and following remarks. Claims 10-13, 15, 18 and 19 are presented for prosecution on the merits.

In the Office Action mailed June 28, 2004, claims 10-14 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claim 14 has been canceled and claims 10-13 have been amended responsive to this rejection. If any additional amendment is necessary to overcome this rejection, the Examiner is requested to contact the Applicant's undersigned representative.

Claim 10 was rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,674,331 to Watson (hereinafter "Watson"), and under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,420,548 to Nakajima (hereinafter "Nakajima"). It is noted that claim 10 has been amended. To the extent that these rejections remain

applicable to currently pending claim 10, the Applicants hereby traverse the rejections, as follows.

Claim 10 recites, in part:

a ferroelectric tuning-fork vibration body generating a sensor signal...  
a differential amplifier having two input terminals between which said sensor signal is input; and  
a capacitor being connected between the two input terminals of said differential amplifier.

In contrast, neither Watson nor Nakajima discloses a tuning-fork vibration gyro having a body formed of a ferroelectric. Watson discloses a forked vibrating element having magnetized rods or tines, but fails to disclose a ferroelectric tuning-fork vibration body. Nakajima discloses a detector that utilizes a quartz crystal oscillator, but similarly fails to disclose a ferroelectric tuning-fork vibration body.

Further, in rejecting claim 10, the Office Action asserts that Nakajima discloses a capacitor 48 connected to the input terminal of differential amplifier 50. Applicants note, however, that the capacitor 48, together with feedback resistor 45 and quartz crystal oscillator 30, forms a feed back circuit for inverting amplifier 46. In addition, capacitor 48 has one end connected to resistors 43 and 44, which are connected to the input terminals of differential amplifier 50, and a second end connected to ground. Thus, the capacitor 48 of Nakajima is not connected between input terminals of the differential amplifier, as recited in claim 10.

Therefore, it is respectfully submitted that claim 10 is patentably distinct over both Watson and Nakajima. Specifically, neither Watson nor Nakajima discloses or

suggests a ferroelectric tuning-fork vibration body generating a sensor signal and a capacitor being connected between the two input terminals of said differential amplifier, as recited in claim 10.

Accordingly, favorable reconsideration and withdrawal of these rejections are respectfully requested.

Each of new claims 18 and 19 recites, in part, a ferroelectric tuning-fork vibration body. As noted above, neither Watson nor Nakajima discloses a ferroelectric tuning-fork vibration body. Claim 18 additionally recites, "two capacitors, each having one end connected to a respective one of the two input terminals of the differential amplifier and a second end commonly connected to a ground potential." It is respectfully submitted that neither Watson nor Nakajima discloses or suggests "two capacitors, each having one end connected to a respective one of the two input terminals of the differential amplifier and a second end commonly connected to a ground potential" as recited in claim 18. Claim 19 additionally recites "two voltage limiting elements, each having one end connected to a respective one of the two input terminals of the differential amplifier and a second end commonly connected to a ground potential." It is respectfully submitted that neither Watson nor Nakajima discloses or suggests this additional limitation of claim 19. For at least these reasons, claims 18 and 19 are patentably distinct over the cited prior art and believed to be in condition for allowance.

Each of dependent claims 11, 13 and 15 depends from any one of claims 10, 12, 18 and 19. As such, each of claims 11, 13 and 15 is allowable for at least the reasons claims 10, 12, 18 and 19 are respectively allowable. Accordingly, favorable action on the pending claims is earnestly solicited.

### **CONCLUSION**

For all of the above reasons, it is respectfully submitted that claims 10-13, 15, 18 and 19 are in condition for allowance and a Notice of Allowability is earnestly solicited.

Should the Examiner determine that any further action is necessary to place this application into better form, the Examiner is invited to contact the undersigned representative at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicants hereby petition for an appropriate extension of time. The Commissioner is hereby authorized to charge any fee deficiency or credit any overpayment associated with this communication to Deposit Account No. 01-2300 **referencing client matter number 108066-00088.**

Respectfully submitted,

Arent Fox, PLLC

A handwritten signature in black ink, appearing to read "Michele L. Connell", written over a horizontal line.

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